

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A process for [[the]] preparation of cyclic carbonates comprising:
~~which comprises~~

- (a) reacting an olefin or an epoxide thereof with at least carbon dioxide ~~or a mixture of oxygen-containing compound and carbon dioxide~~, in the presence of a zeolite-based catalyst encapsulating an organometallic complex and a Lewis base co-catalyst, wherein the organometallic complex comprises a transition metal ion which is Al, Cu, Co or Ni and a coordinating ligand which is a phthalocyanine;
and
- (b) separating the catalyst and recovering the corresponding cyclic carbonate formed.

2. (original) A process as claimed in claim 1 wherein the reaction is carried out at a minimum pressure of 30 psig and temperature in the range of 40 to 120°C for 0.5 to 4 hrs.

Claims 3-6 (canceled)

7. (original) A process as claimed in claim 1 wherein the olefin is of the formula $C_{(n)}H_{2(n)}$ wherein $n=2$ to 10 or its corresponding epoxide.

8. (original) A process as claimed in claim 1 wherein the olefin or epoxide thereof is dissolved in a solvent selected from a polar and non-polar solvent.

9. (original) A process as claimed in claim 8 wherein the solvent is selected from the group consisting of 1,2-dichloromethane, toluene, acetonitrile, methanol and water.

10. (currently amended) A process as claimed in claim 1 wherein the Lewis base co-catalyst is selected from the group consisting of pyridine, a pyridine derivative, alkyl ~~phosphine-phosphene~~, aryl ~~phosphine-phosphene~~, alkyl ammonium salts and phosphonium salts.

11. (currently amended) A process as claimed in claim 1 wherein the carbon dioxide is provided as air or mixed with a compound ~~In still another embodiment the oxygen-containing compound~~ is selected from the group consisting of oxygen, ~~air~~, nitrogen oxides, hydrogen peroxide and alkyl hydroperoxide.

12. (currently amended) A process as claimed in claim 1 wherein the ratio of the olefin/its or epoxide thereof to the catalyst is in the range of 2500:1 to 5:1.

13. (original) A process as claimed in claim 1 wherein the reaction is phosgene free.

14. (currently amended) A process as claimed in claim 1 wherein the ~~zeolite-based~~ catalyst is separated and recycled.

15. (currently amended) A process as claimed in claim 14, wherein the separation of the catalyst is carried out ~~out~~ by filtration.

16. (currently amended) A process as claimed in claim 1 wherein ~~the~~ conversion of the ~~olefin-hydrocarbon~~ or the epoxide thereof is greater than or equal to 85%, and the selectivity for the cyclic carbonate is greater than or equal to 85%.

17. (new) A process for preparation of cyclic carbonates comprising:

- (a) reacting an olefin with at least carbon dioxide, in the presence of a zeolite-Y catalyst encapsulating an organometallic complex and a Lewis base co-catalyst, wherein the organometallic complex comprises a transition metal ion which is Al, Cu, Co or Ni and a coordinating ligand which is a phthalocyanine; and

- (b) separating the catalyst and recovering the corresponding cyclic carbonate formed.

18. (new) A process as claimed in claim 17 wherein the reaction is carried out at a minimum pressure of 30 psig and temperature in the range of 40 to 120°C for 0.5 to 4 hrs.

19. (new) A process as claimed in claim 17 wherein the olefin is of the formula $C_{(n)}H_{2(n)}$ wherein $n=2$ to 10.

20. (new) A process as claimed in claim 19 wherein the olefin is dissolved in a non-polar aprotic solvent.

21. (new) A process as claimed in claim 20 wherein the Lewis base co-catalyst is a pyridine derivative.

22. (new) A process as claimed in claim 17 wherein the carbon dioxide is provided as air or mixed with a compound selected from the group consisting of oxygen, nitrogen oxides, hydrogen peroxide and alkyl hydroperoxide.

23. (new) A process as claimed in claim 17 wherein the ratio of the olefin to the catalyst is in the range of 2500:1 to 5:1.

24. (new) A process as claimed in claim 17 wherein the reaction is phosgene free.